



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/717,076

11/18/2003

Brian S. Appel

12833-00011

6999

21918 7590 09/17/2009
DOWNS RACHLIN MARTIN PLLC
199 MAIN STREET
P O BOX 190
BURLINGTON, VT 05402-0190

EXAMINER

NGUYEN, TAM M

ART UNIT

PAPER NUMBER

1797

NOTIFICATION DATE

DELIVERY MODE

09/17/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patip@drm.com

Office Action Summary	Application No. 10/717,076	Applicant(s) APPEL ET AL.	
	Examiner TAM M. NGUYEN	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21-23, 30, 40-42, 65-71, 75-82, and 84-119 is/are pending in the application.
- 4a) Of the above claim(s) 22, 23, 65-71 and 106 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 21, 30, 40-42, 75-82, 84-105 and 108-119 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/10/09; 6/12/09</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Amendment***

The rejection of claims 1 and 2 under 35 USC § 102(b) anticipated by Lang (US 4,094,740) is withdrawn by the examiner in view of the amendment filed on January 12, 2009.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 26, 30, 75-82, 84-86, and 105 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 6-8, 23, and 24-29 of U.S. Patent No. 7,301,060. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims draw to a process for converting animal waste to useful products. The Patent claimed set does not specifically claim that the animal waste comprises animal manure. It would have been obvious to one of skill in the art at

Art Unit: 1797

the time the invention was made to have modified the process of the Patent claimed set by utilizing an animal waste containing animal manure because the claimed set include many different wastes including animal waste and leaves. It would be expected that an animal waste comprising animal manure would be successfully treated in the process of the Patent claimed set.

The patent claimed set does not claim a pre-heating step.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of the patent claimed set by pre-heating the feedstock to the reaction conditions for effectiveness.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

Art Unit: 1797

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-19, 21, 30, 40-42, 75-82, 84-105 and 108-119 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang (US 4,094,740)

Lang discloses a process for convert a solid municipal waste feedstock (e.g., animal waste) to a liquid fuel by preparing a slurry stream from the feedstock. The slurry stream is then passed to a reaction zone (e.g., hydrolysis) to provide a solid product, liquid product, and water. The liquid product is further process to produce liquid fuel. Since the reaction zone is operated under hydrolysis, it would be expected the pressure in the reaction zone is at least at the saturation pressure of water. It is noted that Lang does not specifically discloses that the product include oil. However, the product from the hydrolysis would include at least a small amount of oil. (See abstract; the Figure; col. 1, lines 30 through col. 3, line 56)

Lang does not disclose a step of pre-heating the feedstock.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Lang by heating the feedstock as claimed because it would be expected that heating the feedstock to the reaction conditions would improve the effectiveness of the process.

Lang does not specifically disclose that the animal waste comprises animal offal, turkey offal, or animal manure.

Art Unit: 1797

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Lang by utilizing a waste comprising animal offal, turkey offal, or animal manure because Lang teaches that the waste comprises animal (meat and fat) and cabbage leaves. It would be expected that a waste comprising animal offal, turkey offal, or animal manure would successfully treated in the process of Lang because of the similarities between the feedstock.

Lang does not teach the operating temperatures and pressures as claimed.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Lang by utilizing an operating temperature and pressure because it is within the level of one of skill in the art to utilize any effective condition that effectively hydrolyzes the waste to useful products including the claimed conditions.

Lang does not specifically teach that the liquid product is converted to hydrocarbon oils.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Lang by converting the liquid product to hydrocarbon oils as claimed because it is within the level of one of skill in the art to convert the liquid product to any liquid fuel including hydrocarbon oil and fuel gas.

Response to Arguments

The argument that the “fuel produced by Lang is an alcohol not oil is not persuasive. Since Lang utilizes a feedstock as claimed and hydrolysis the feedstock as claimed, it would be expected that at least a small amount of oil is produced in the step.

Art Unit: 1797

The argument that Lang does not disclose a step of pre-heating the feedstock is not persuasive because of the new rejection above.

The argument that Lang teaches away from producing oil because Lang specifically teaches a fermentation step to produce alcohol is not persuasive. The examiner maintained that the product from the hydrolysis reaction zone would comprise hydrocarbons (e.g., oil) as claimed. The claimed process does not exclude a fermentation step.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAM M. NGUYEN whose telephone number is (571)272-1452. The examiner can normally be reached on Monday through Thursday.

Art Unit: 1797

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

tn

/Tam M. Nguyen/

Primary Examiner, Art Unit 1797